

Healthy controls

Children		Adults	
Gender	Age at ILC evaluation (years)	Gender	Age at ILC evaluation (years)
M	6.0	M	37
F	15.4	F	32
F	17.4	F	23
M	15.2	F	23
M	13.5	F	23
M	1.8	F	23
M	7.6	M	33
F	13.8	F	23
F	11.8	F	65
F	10.5	M	23
F	13.9	F	23
M	6.0	F	49
M	13.0	F	58
F	12.3	M	26
M	11.5	F	50
M	6.9	M	65
M	14.3	M	22
F	5.7	M	28
M	6.5	F	24
F	14.9	F	58
M	13.1	M	28
F	15.9	F	30
F	13.3	F	27
M	11.7	F	31
F	12.1	F	27
F	14.8	M	37
M	6.6	F	46
F	15.9	M	48
F	14.5	M	51
		M	32

SCID-X1 and Jak3 Patients

Children				Adults			
Code	Diagnosis	Gender	Age at ILC evaluation (years)	Code	Diagnosis	Gender	Age at ILC evaluation (years)
<i>After HSCT</i>				<i>After HSCT</i>			
P1	γC	M	13.5	P8	γC	M	39.5
P2	JAK3	F	11.4	P9	JAK3	M	31.4
P3	γC	M	11.2	P10	JAK3	F	33.1
P4	JAK3	F	10.9	P11	JAK3	F	30.3
P5	γC	M	10.4	P12	γC	M	28.1
P6	γC	M	9.5	P13	γC	M	26.4
P7	JAK3	F	7.6	P14	γC	M	23.5
<i>Before HSCT</i>				<i>Before HSCT</i>			
P19	JAK3	M	0.4	P15	γC	M	22.9
P20	JAK3	F	0.7	P16	γC	M	21.3
P21	JAK3	F	1.1	P17	γC	M	21.9
				P18	γC	M	18.2

CDC Patients

Children				Adults			
Code	Diagnosis	Gender	Age at ILC evaluation (years)	Code	Diagnosis	Gender	Age at ILC evaluation (years)
C1	RAG1	F	9.1	C6	AML	M	20.2
C2	RAG1	F	11.1	C7	ALL	M	18.1
C3	ALL	F	4.8	C8	SAA	F	17.8
C4	SAA	M	7.8				
C5	ALL	M	11.8				
C9	RAG1	F	1.5				
C10	RAG2	F	0.8				
C11	RAG1	F	4.2				
C12	RAG1*	F	9.6				
C13	RAG1	F	0.3				

* hypomorphic *RAG1* mutation

Supplementary Table 1. Patient list

Antibody	Clone (Cat#)	Fluorophore	Manufacturer	Dilution	Application
mouse anti-NKp46	29A1.4	FITC	SONY	1 :100	Flow cytometry
mouse anti-NKp46	29A1.4	Pacific Blue	eBioscience	1 :100	Flow cytometry
mouse anti-CD45.1	A20	FITC	BD Pharmigen	1 :800	Flow cytometry
mouse anti-CD45.1	A20	PerCP-Cy5	BioLegend	1 :800	Flow cytometry
mouse anti-CD45.2	104	AmCyan	BD Horizon	1 :400	Flow cytometry
mouse anti-CD3 ϵ	145-2C11	biotinylated	SONY	1 :400	Flow cytometry (primary stain)
mouse anti-CD3 ϵ	145-2C11	PerCP-Cy5.5	SONY	1 :200	Flow cytometry
mouse anti-CD8	53-6.7	biotinylated	SONY	1 :800	Flow cytometry (primary stain)
mouse anti-CD19	6D5	biotinylated	SONY	1 :1,600	Flow cytometry (primary stain)
mouse anti-CD19	6D5	APC	SONY	1 :1,000	Flow cytometry
mouse anti-TCR β	H57-597	biotinylated	SONY	1 :400	Flow cytometry (primary stain)
mouse anti-TCR δ	GL3	biotinylated	BD Pharmigen	1 :800	Flow cytometry (primary stain)
mouse anti-TER119	TER-119	biotinylated	BD Pharmigen	1 :1,600	Flow cytometry (primary stain)
mouse anti-GR1	RB6-6B2	biotinylated	BD Pharmigen	1 :3,200	Flow cytometry (primary stain)
mouse anti-NK1.1	PK136	biotinylated	BD Pharmigen	1 :100	Flow cytometry (primary stain)
mouse anti-ST2	DIH9	PE	BioLegend	1 :200	Flow cytometry
mouse anti-CD49a	Ha 31/8	PE	BD Biosciences	1 :100	Flow cytometry
mouse anti-CD49b	HM-ALPHA2	APC	BD Biosciences	1 :100	Flow cytometry
mouse anti-CD127	IM7	PE-Cy7	eBioscience	1 :100	Flow cytometry
mouse anti-cKit	2B8	eFluor780	SONY	1 :1,600	Flow cytometry
mouse anti-Icos	C398.4A	BV421	BioLegend	1 :200	Flow cytometry
mouse anti-CD90	53-2.1	BV605	BD Biosciences	1 :400	Flow cytometry
mouse anti-Sca1	D7	V500	SONY	1 :400	Flow cytometry
mouse anti-NK1.1	PK136	BV655	SONY	1 :100	Flow cytometry
mouse anti-KLRG1	2F1	BV711	BD Horizon	1 :300	Flow cytometry
mouse anti-CD4	GK1.5	BV786	BD Horizon	1 :1,600	Flow cytometry
mouse anti-ROR δ t	Q31-378	PerCP-Cy5	BD Biosciences	1 :100	Flow cytometry
mouse anti-Gata3	TWAJ	APC	eBioscience	1 :100	Flow cytometry
mouse anti-FLT3	A2F10	PE	BioLegend	1 :100	Flow cytometry

streptavidin		PE-Cy5	BioLegend	1 :1,100	Flow cytometry (secondary stain)
mouse anti-CD3e	PS1	unconjugated	Abcam	1:50	IHC-P (primary stain)
rat anti-CD11b/Integrin alpha M	M1/70	unconjugated	R&D Systems	1:1,000	IHC (primary stain)
goat anti-ICOS/CD278	aa57-71	unconjugated	LS Bio	1:133	IHC-P (primary stain)
rabbit anti-MAFA	orb11013	unconjugated	Biorbyt	1:250	IHC-P (primary stain)
mouse anti-human lineage cocktail	348805	Pacific Blue	BioLegend	1:100	IHC (primary stain)
goat anti-rabbit IgG	A-21074	Alexa Fluor 660	Life Technologies	1:200	IHC (secondary stain)
donkey anti-mouse IgG	A-31571	Alexa Fluor 647	Life Technologies	1:100	IHC (secondary stain)
donkey anti-goat IgG	A-11058	Alexa Fluor 594	Life Technologies	1:500	IHC (secondary stain)
chicken anti-rat IgG	AS122584	DyLight 350	Agrisera	1:1,000	IHC (secondary stain)
mouse anti human NKp46	NA	unconjugated	Innate Pharma	1 :4000	IHC (primary stain)
rabbit polyclonal anti-CD3	A045229	unconjugated	Dako	1 :250	ICH (primary stain)
goat anti-human NKp46	≠AF1850	unconjugated	R&D systems France	1 :20 (10µg/ml)	IHC (primary stain)
mouse anti-human CD3	UCHT1 (≠ 557706)	A647	BD Pharmingen	1 :150	Flow cytometry IHC-IF
donkey Anti-Goat IgG (H+L)	≠705-545-147	A488	Jackson Immuno Research Laboratories	1 :500	IHC-IF
ProLong® Gold Antifade Mountant with DAPI	≠P36931	–	Life Invitrogen	–	IHC-IF
mouse anti-CD45	2D1	APC-H7	BD Pharmigen	1 :100	Flow cytometry
mouse anti-TCRYδ	B1	FITC	BD Pharmigen	1 :100	Flow cytometry
mouse anti-TCR αβ	T10B9	FITC	BD Pharmigen	1 :25	Flow cytometry

mouse anti-CD3	UCTH1	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD19	HIB19	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD14	M5E2	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD16	3G8	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD94	HP-3D9	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD123	7G3	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD34	581/CD34	FITC	BD Pharmigen	1 :25	Flow cytometry
mouse anti-CD303	AC144	FITC	Miltenyi Biotec	1 :50	Flow cytometry
mouse anti-FcεRI	AER-37	FITC	Ebioscience	1 :100	Flow cytometry
mouse anti-CD127	HIL-7R-M21	PE-C7	BD Pharmigen	1 :100	Flow cytometry
rat anti-CD294	BM16	Alexa Fluor 647	BD Horizon	1 :100	Flow cytometry
mouse anti-CD117	YB5.B8	PE-Cy5	BD Pharmigen	1 :100	Flow cytometry
mouse anti-NKp46	9E2/NKp46	BV421	BD Horizon	1 :100	Flow cytometry
mouse anti-NKp44	P44-8.1	PE	BD Pharmigen	1 :100	Flow cytometry
mouse anti-CD5	UCTH2	Alexa Fluor 700	BD Pharmigen	1 :100	Flow cytometry
mouse anti-human CD3	UCHT1 (≠ 557706)	A647	BD Pharmigen	1 :150	Flow cytometry

Supplementary Table 2. Antibodies and staining reagents used in this study